

Coffee Decaffeination Process and Cancer

Coffee is a common beverage made from the roasted and ground berries of the small evergreen tree of the genus *Coffea*. Several large-scale studies have been conducted to determine whether there is an association between coffee intake and cancer risk. Most of them have not found an increased incidence of cancer among people who drink coffee.

Coffee contains caffeine, a mild stimulant also found in other popular drinks such as soft drinks and tea. Research into a possible link between caffeine and cancer has been inconclusive.

Studies have also been conducted to evaluate the possible risk of cancer from decaffeinated coffee. Trichloroethylene, a solvent once used to decaffeinate coffee, was tested by the National Cancer Institute (NCI) in 1976 and shown to cause liver tumors in mice. The NCI later conducted an epidemiologic study of civilian workers exposed to trichloroethylene while engaged in aircraft maintenance at a United States Air Force Base. In reviewing this and other epidemiologic studies, the International Agency for Research on Cancer concluded that evidence for the risk of cancer from trichloroethylene in humans was limited.

Since the 1970s, coffee companies have switched to other solvents such as methylene chloride (dichloromethane), ethyl acetate, or other types of processing to decaffeinate coffee. However, because methylene chloride is now strongly suspected to cause cancer in humans, most

coffee producers no longer use it. Companies that produce coffee may be contacted to learn about their decaffeination method.

Additional information about decaffeinating solvents can be obtained from the U.S. Food and Drug Administration (FDA) Center for Food Safety and Applied Nutrition at 200 C Street, SW., Washington, DC 20204; or from the FDA's Office of Consumer Affairs toll-free information line at 1-888-INFO-FDA (1-888-463-6332). The FDA Web site is located at <http://www.fda.gov> on the Internet.

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Sources of National Cancer Institute Information

Cancer Information Service

Toll-free: 1-800-4-CANCER (1-800-422-6237)

TTY (for deaf and hard of hearing callers): 1-800-332-8615

NCI Online

Internet

Use <http://www.cancer.gov> to reach NCI's Web site.

CancerMail Service

To obtain a contents list, send e-mail to cancermail@icicc.nci.nih.gov with the word "help" in the body of the message.

CancerFax® fax on demand service

Dial 301-402-5874 and listen to recorded instructions.

This fact sheet was reviewed on 6/9/99